

The rejection of claim 19 under 35 U.S.C. § 102(b) is respectfully traversed. Claims 17-20 have been amended to further recite that the mineral insulation is MgO, and that kaolin is added to the MgO. This feature is not disclosed by either the Koch et al. or Kataoka et al. reference. The Koch et al. reference discloses adding kaolin to a spinel material ($MgAl_2O_4$), the spinel material being made up from MgO and Al_2O_3 . It does not disclose adding kaolin to just MgO. The Kataoka et al. reference discloses adding kaolin to a polymer material. Since neither reference discloses adding kaolin to MgO, claim 19 is believed to be allowable.

The rejection of claim 20 under 35 U.S.C. § 103(a) is respectfully traversed. Claim 20 has been amended as recited above, and is believed to be allowable for the same reasons.

The rejection of claims 1, 3-9 and 11-18 under 35 U.S.C. § 103(a) is respectfully traversed. In making the rejection, the Examiner has combined Koch et al. with Kataoka et al. The Koch et al. reference discloses an insulated electrical component, such as a cable that uses a spinel material ($MgAl_2O_4$) having a kaolin additive. The Kataoka et al. reference discloses a heat insulating polymer material incorporating 5-50% wt. of fine powdered kaolin (col. 16, line 53 - col. 17, line 9). The applicants believe that it would not have been obvious to one skilled in the art to combine the Koch et al. reference with the Kataoka et al. reference to produce a mineral insulated cable containing 3%-20% of kaolin by dry weight. Koch et al. discloses adding kaolin to a non-polymeric spinel material, while Kataoka et al. discloses adding 5-50% wt. of kaolin to a polymer material. Since the two references use kaolin with different base materials (ie. spinel and polymer), and there is no teaching or suggestion in either reference that kaolin may be used with differing base materials, it would not have been obvious to one skilled in the art to modify the Koch et al. reference to use 5-50% wt. of kaolin additive, as taught by Kataoka et al.

As described above, claims 17-20 have been amended to further clarify the invention by reciting that the mineral insulation is MgO. For that reason, and for the reasons recited above with respect to claims 1, 3-9 and 11-18, claims 17-20 are likewise believed to be allowable.

For the reasons cited above, all pending claims 1, 3-9 and 11-20 are believed to be in condition for allowance. As all grounds of rejection have been addressed and overcome, entry of this Amendment and issuance of a Notice of Allowance of claims 1, 3-9 and 11-20 are respectfully solicited.

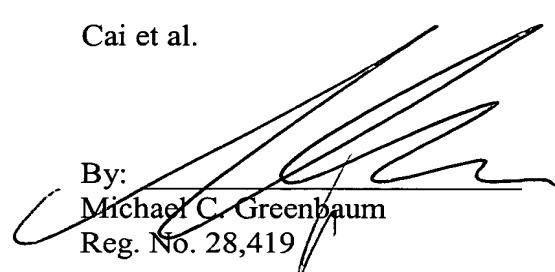
In the event there are any questions relating to this Amendment or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney

concerning such questions so that prosecution of this application may be expedited. Please charge any shortage or credit any overpayment of fees to Deposit Account No. 23-2185 (114685-00105).

In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this response, Applicants hereby petition under 37 CFR 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized above.

Respectfully Submitted,

Cai et al.



By:
Michael C. Greenbaum
Reg. No. 28,419

Customer No. 002779
BLANK ROME COMISKY & MCCAULEY LLP
The Farragut Building
900 - 17th Street, N.W., Suite. 1000
Washington, D.C. 20006
Telephone: (202) 530-7400
Facsimile: (202) 463-6915

MCG/JJY

VERSION WITH MARKINGS TO SHOW CHANGES

17. (Amended) [In a] A cable including an outer metallic sheath[,] with at least one metallic conductor therein, and having a mineral insulation disposed between the outer sheath and the metallic conductor; and

the [improvement wherein the] mineral insulation [comprises] comprising an MgO insulation having between 3% and 20% by dry weight of a kaolin additive, wherein the kaolin additive prevents moisture from infiltrating the insulation and increases the resistivity of the insulation at high temperatures.

18. (Amended) A process of making a cable, comprising:

providing an outer metallic sheath;

disposing at least one metallic conductor in the metallic sheath;

filling the metallic sheath with a MgO mineral insulation including between 3% and 20% by dry weight of a kaolin additive, wherein the kaolin additive prevents moisture from infiltrating the insulation and increases the resistivity of the insulation at high temperatures; and

drawing down the metallic sheath.

19. (Amended) [In a] A cable including an outer metallic sheath[,] with at least one metallic conductor therein, and having a mineral insulation disposed between the outer sheath and the metallic conductor; and

the [improvement wherein the] mineral insulation [comprises] comprising an MgO insulation having a kaolin additive.

20. (Amended) A process of making a cable, comprising:

providing an outer metallic sheath;

disposing at least one metallic conductor in the metallic sheath;

filling the metallic sheath with an MgO mineral insulation including a kaolin additive, wherein the kaolin additive prevents moisture from infiltrating the insulation and increases the resistivity of the insulation at high temperatures; and

drawing down the metallic sheath.